

# S.R.Smith Treo LED Light

## ASSEMBLY & INSTALLATION INSTRUCTIONS



Installation information applies to both RGB and White Light only models.

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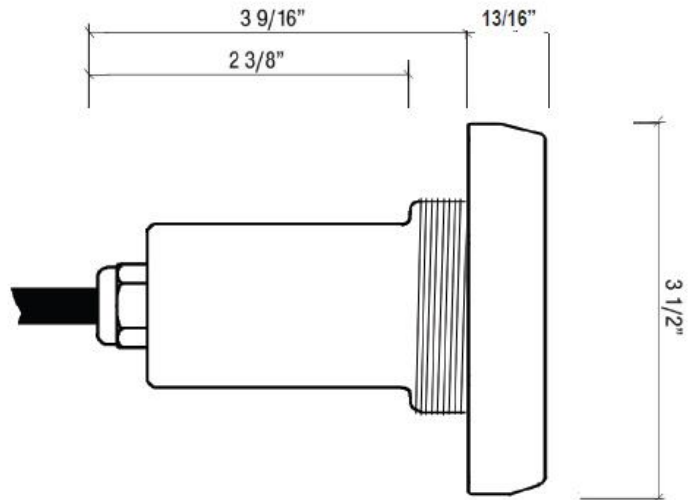
**CONFORMS TO UL STD 676  
CERTIFIED TO CSA STD C22.2#89**



**Intertek  
4005496**

Thank you for purchasing the S.R.Smith Treo LED Light for underwater lighting applications in pools, spas, and water features.

#### Overall Dimensions



#### Electrical Specification

Class 2 (or better) Input voltage: 12-14 VAC

Color Change (RGB): 5.0 Watts max.

White Light Only: 3.0 Watts max.

S.R.Smith poolLUX™ ACP\* compatible

(\*ACP = Advanced Control Protocol – see pg. 4 for additional information)

#### Important Installation Information

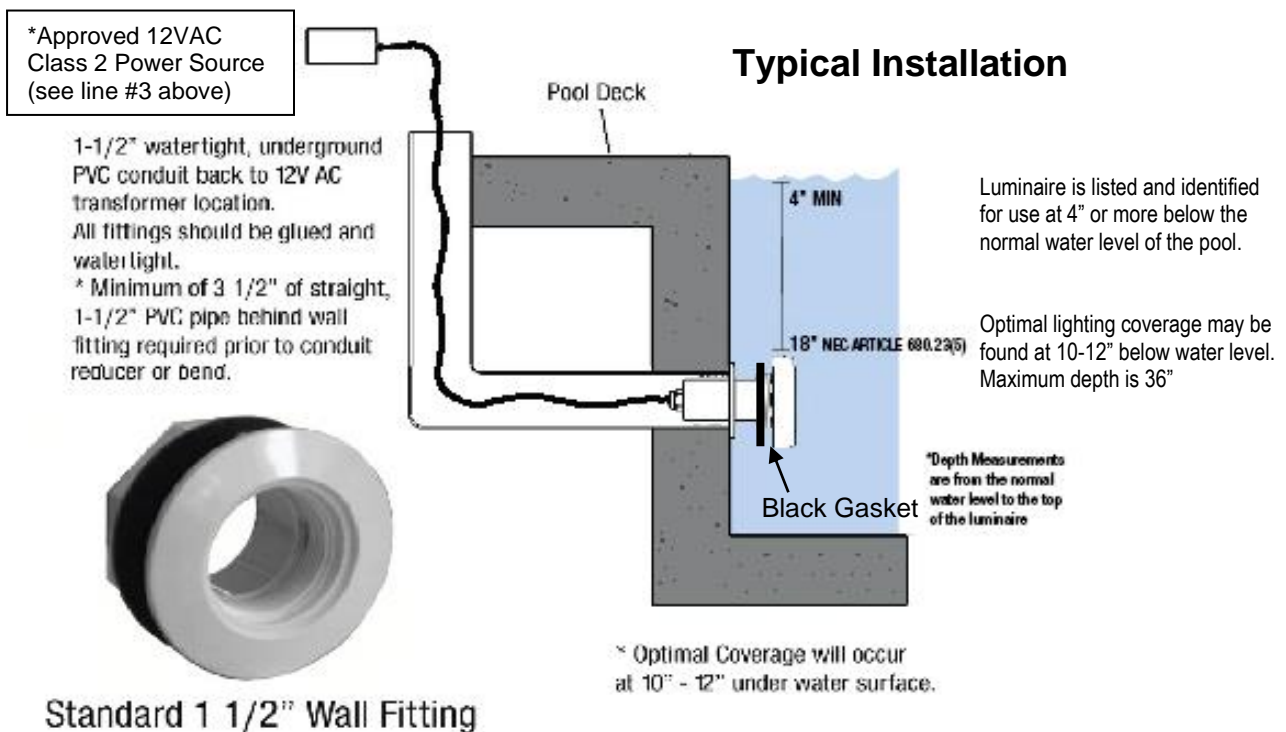
1. Ensure that the electrical system for your pool conforms with all requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.
2. This 12V Underwater Light must be installed in accordance with the National Electrical Code by a Certified Electrician or a Qualified Pool Technician. **NOTE:** No Bonding Terminal is required on the forming shell since the fixture is an all plastic construction and complies with NEC article 680 Requirements.
3. Waterproof conduit must be used from the S.R.Smith Treo LED Light to the 'above ground' power supply equipment.
4. **For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.**
5. **DO NOT CONNECT THIS 12V LIGHT DIRECTLY TO A 120VAC CIRCUIT - LIGHT WILL BE DAMAGED.**
6. Fit your S.R.Smith Treo LED Light/s as outlined in the following detailed installation instructions.

THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS  
NE CONVIENT PAS AUX SORTIES DE SECOURS

## Installation instructions for S.R.Smith Treo LED series light in standard 1 1/2" wall fittings for pools or spas

1. Per NEC Article 680.23 (5) lights are to be installed in no less than 18" (450mm) below the normal water level unless the luminaire is listed and identified for use at lesser depths. S.R.Smith lights are listed and identified for use at depths no less than 4" (100mm) below the normal water level. All depth measurements are from the normal water level to the top of the Luminaire lens.
2. Fit an S.R.Smith LNS-2G, LNS-2A, LNS-2V or similar 1 1/2" pool wall fitting into the pool wall at the selected location. Watertight PVC conduit must be used from the wall fitting to the above water/ground level conduit termination on the equipment or supply side of the 12V AC line. Please refer to the illustration below.
3. Fit the S.R.Smith Treo LED Light into the 1 1/2" wall fitting as shown and carefully pull the waterproof supply cable through. Carefully thread the S.R.Smith Treo into the threads and gently tighten the light body until secure. DO NOT Over-tighten the light as damage may occur. Connect the red / black wire conductors of the S.R.Smith Treo to an approved, low voltage, class 2, Magnetic Type Power Source operating between 12 - 14VAC or an S.R.Smith poolLUX™ brand power supply as required by NEC or relevant local codes and ordinances.

**Note:** Even though the housing gasket (between Wall Fitting and Light) can be replaced by a bead of silicon suitable for pool use, water will eventually fill the conduit so be sure the conduit is watertight and terminates above ground.



## S.R.Smith Treo LED Light Winterization Recommendations

Swimming Pools may or may not be drained completely. If not drained completely, the water level should be lowered below the S.R.Smith Treo LED Light and make sure that all water is drained from the wall fitting and conduit. Alternatively, the S.R.Smith Treo LED Light may be removed completely, the conduit purged of all water, and a 1 1/2" NPT male plug with thread sealing tape may be used to close the wall fitting.

**NOTE** - If water is trapped in conduit, damage may occur from freeze expansion.

## Basic Operation for LED Color Changing Lamp (RGB) - White Only

lamps are simply on or off

When connected to an approved, 12VAC, Class 2 power supply - The S.R.Smith Treo LED color changing light uses simple 'off / on' power switching to control the basic, pre-defined color modes with memory function.

### Memory

The memory function remembers the last color setting. For example, if the light was last used in the blue mode, the next time the light is turned on it will be blue mode.

### Color Mode Selection

The LED will turn on to the color in memory. To move to the next color mode, quickly (within one second or faster) toggle the power to the lights 'OFF / ON'.

Advance through the modes until the desired mode is selected. The modes will cycle 1,2,3,4,5,6,7,8, then cycle back to 1. See table below for details.

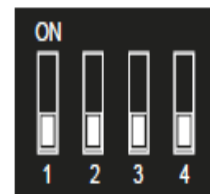
Color Mode Selection Guide	
Mode 1	Soft Color Change
Mode 2	White
Mode 3	Blue
Mode 4	Green
Mode 5	Red
Mode 6	Amber
Mode 7	Magenta
Mode 8	Flash Color Change

### Color Sync Reset

To synchronize all lights on the system including older \*Fiberstars LED Series Pool lights, you must use the following sequence:

1. Turn lights 'ON' to confirm the color modes are out of sync.
2. Turn lights 'OFF' for 5 seconds or more.
3. Toggles lights 'ON' / OFF' three times within three seconds - must end in 'OFF' condition
4. Leave lights in 'OFF' condition for 5 seconds.
5. Turn lights 'ON' and confirm that all lights are in mode #1, Soft Color Change

\* Older Fiberstars LED lights can synchronize with the newest generation lights ONLY if they have their DIP switches in their default, 'All Down' position. In a mixed environment, the Color Sync Reset will need to be performed each time the lights are used and color synchronization is desired.



### Advanced Operation via ACP

Advance Control Protocol (ACP) provides dimming and custom color control through a dedicated color remote control. All S.R. Smith LED lights (Treo®, Fiberglass®, Treo Micro®) and 2015 or later water features are ACP compatible.

*This light is equipped with a thermal protection circuit built into the LED lamp assembly. If the circuit detects that the lamp assembly is getting too hot for a given environment, it will automatically reduce the brightness in increments until the lamp remains below the thermal threshold. If this condition occurs, it may or may not be noticeable by the human eye and is a normal function, not a sign of malfunction or failure.*